Kitsap Peninsula Business Journal KPBJ.COM

August 2, 2011
Opinion

No perfect solution to our energy needs

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Imagine coming home from work, tossing your keys on the hall table and flipping on the light switch. Nothing happens. You sigh, remembering that this is the night your neighborhood is scheduled for a rolling brownout.

Even with electricity at 25 cents a kilowatt hour, there's not enough power on the grid to supply the homes, hospitals, factories and office buildings in your state. New laws limit the amount of electricity you can use, and homes are equipped with utility sensors that allow regulators to remotely turn off your energy-hungry appliances.

This scenario may not be as far-fetched as it seems.

Over the years, legislators and regulators have steadily reduced the supply of affordable energy in the United States, while the population — and the demand for energy — has continued to grow.

For example, while France gets 75 percent of its electricity from greenhouse-gas-free nuclear energy, opponents have virtually tabled plans to develop safe new nuclear technologies in the U.S.

Crude oil has become a pariah, with the federal government and states banning oil exploration in many places. Even though technology has vastly improved, and we're sitting on enough untapped oil to meet our needs for 300 years, U.S. oil exploration has slowed to a trickle.

Coal, which provides half the electricity in the U.S. and the world, is a perennial target. Ironically, some anti-coal groups oppose developing clean coal technologies in the U.S. because they want to eliminate coal worldwide, an unrealistic goal.

Here in Washington, the target is clean, renewable hydropower, which supplies about 75 percent of our electricity. Activists want to breach the four dams on the lower Snake River in the name of increasing salmon survival, but they ignore the fact that salmon are thriving, even in the far upper tributaries of the Columbia and Snake rivers — and they have no idea how to replace the electricity the dams provide to millions of people.

The Bonneville Power Administration says replacing the hydropower with gas-fired turbines — the cheapest alternative — will increase costs tenfold.

But wait — now, natural gas has become a target.

Coal opponents once touted natural gas as the cleanest fossil fuel, but they now attack gas pipelines and "fracking," a technique to recover vast natural gas reserves embedded in shale rock deep in the earth.

Fracking, or hydraulic fracturing, has been used in the U.S. for 60 years, but with new and safe horizontal drilling, fracking has made shale gas plentiful. High-pressure water, sand and small amounts of additives we use every day around our households are pumped into shale deposits forcing the natural gas into snug steel-cased pipe and safely brought to surface.

Extracting shale gas is already heavily regulated by federal, state and local governments, but opponents fear the process could contaminate drinking water. Every year, crude oil producers safely treat 18 billion barrels of water collected in extraction process, while shale gas producers safely treat an estimated 50,000 barrels.

If there are legitimate problems with the process, government regulators and scientists should continue to work with experts to address them, but we all need to ask ourselves the question: What happens if regulators also reduce supplies of natural gas? What happens to the 70 million homes and businesses in the U.S. that depend on it?

Alternative energy? Dr. Julio Friedmann, of the **Lawrence Livermore National Laboratory**, says, "Solar and wind power are going to be important, but it is really hard to get them beyond 10 percent of total power supply."

So, we have some tough choices to make. There is no magic bullet, no entirely risk-free energy source. Politicians and ideologues should step aside and let the scientists and engineers develop innovative solutions that provide for the future of our nation — or it could be "lights out."